REMARKS

With this Amendment, claims 5, 6, 10, 13, 17, 18, 28, 29, 37, and 38 are canceled without prejudice or disclaimer. Therefore, claims 1, 3, 7, 8, 11, 14, 15, 19-22, 24, 26, 30, 31, 33, 35, 39, and 40 are all the claims currently pending in this Application.

Claims 7, 8, 30, 31, 39, and 40 are amended, these amendments are fully supported in the originally-filed specification at least by lines 11-25 of page 28. Entry of these amendments is respectfully requested.

Prior Art Rejections

•Claims 1, 3, 24, 26, 33 and 35 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Scarth (U.S. Patent 6,996,323) in view of Chang (U.S. Publication 2003/0012509).

Claims 5, 28, and 37 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable
 Over Scarth in view of Chang and Shimokawa (U.S. Patent 6,445,471).

 Claims 6, 10, 13, 29, and 38 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Scarth in view of Shimokawa.

•Claims 7, 21, 30, and 39 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Scarth in view of Chang and Kawasaki (U.S. Patent 6,288,836).

 Claims 8, 11, 14, 22, 31, and 40 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Scarth in view of Kawasaki.

 Claim 15 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Scarth in view of Chang and Shimomura (U.S. Publication 2002/0126372).

•Claim 17 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Scarth in view of Chang, Shimokawa, and Shimomura.

Olaim 18 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Scarth in view of Shimokawa and Shimomura.

 Claim 19 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Scarth in view of Chang, Kawasaki, and Shimomura.

•Claim 20 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Scarth in view of Kawasaki and Shimomura.

Claims 1, 3, 15, 24, 26, 33, and 35. In the April 6, 2009 Amendment, Applicant amended claims 1, 3, 24, 26, 33, and 35 to include a second step detection:

"a first optical signal detector for detecting the presence or absence of an optical signal ... based on whether an optical signal in the channel is equal to or lower than a first no-signal criterion level; ... and a second optical signal transmission detector for detecting, if the first optical signal transmission detector detects the presence of the optical signal, whether an attenuator for attenuating the optical signal in the channel is faulty based on a determination of whether the optical signal in the channel is equal to or lower than a second no-signal criterion level." (claim 1, see also analogous limitations in claims 3, 24, 26, 33, and 35)

In response to this Amendment, in the current Office Action, the Examiner asserts that his rejection is modified and is now based on the embodiment of Scarth illustrated in Figure 6.

Applicant notes that Figure 6 illustrates two sets of tap couplers: tap couplers 601-608 measuring power at the inputs to the eVOAs 1-n, and tap couplers 609 to 616 measuring the power at the outputs of the eVOAs 1-n (col. 8, lines 4-8). Similar to Figure 2 of Scarth, Figure 6 does illustrate two sets of tap couplers. Thus, the Examiner is correct in his assertion that Scarth

discloses both before attenuator taps and after-attenuator taps. However, Scarth still does not disclose or suggest the above-noted limitations of claims 1, 3, 24, 26, 33, and 35.

More specifically, these claims not only recite first and second optical signal transmission detectors, but they specifically recite that the first detector detects the presence or absence of a signal based a first no-signal criterion level, and that the second detector detects whether an attenuator is faulty based on a second no-signal criterion level. There is no disclosure or suggestion in Scarth of the detectors 609-616 detecting based on criteria different from detectors 601-608, and there is no disclosure or suggestion of any of the detectors detecting whether an attenuator is faulty.

None of the other cited references remedy this deficiency.

Therefore, Applicant respectfully submits that claims 1, 3, 24, 26, 33, and 35 are patentable over the cited art, and that claim 15 is patentable at least by virtue of its dependency. Applicant respectfully requests that the rejections of these claims be reconsidered and withdrawn.

Claims 5, 6, 10, 13, 17, 18, 28, 29, 37, and 38. These claims are canceled, as noted above.

Claims 7, 8, 11, 14, 19-22, 30, 31, 39, and 40. Independent claims 7, 8, 30, 31, 39, and 40, as amended, recite:

"a supervisory signal receiver for receiving a supervisory signal indicating whether there is transmission of at least part of the optical signals of the respective channels which form the multiplexed optical signal input to the demultiplexer and transmitting channel alive information for determining whether the optical signals of the respective channels should be passed or stopped" (claim 7. as

amended, see also analogous limitations in claims 8, 30, 31, 39, and 40)

With respect to the determination of whether any optical signal is transmitted in a particular channel, the Examiner refers to the Kawasaki disclosure that ;each channel of the WDM signal light can be automatically controlled", and asserts that "there is no way to control individual channel levels of the WDM signal if the supervisory circuit only knows the total number of channels." However, Applicant submits that Kawasaki fails to teach or suggest any transmission of information indicating whether optical signals of respective channels should be passed or stopped.

None of the other cited references remedy this deficiency.

Therefore, Applicant submits that claims 7, 8, 30, 31, 39, and 40 are patentable over the cited references and that claims 11, 14, and 19-20 are patentable at least by virtue of their dependencies. Applicant respectfully requests that the rejections of these claims be reconsidered and withdrawn.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 10/774,844

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Respectfully submitted,

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